Patent claims

1. Use of an oligoribo- or oligodeoxyribonucleotide which is capable of hybridizing with the mRNA which codes for the protein Ki-67, or of a physiologically acceptable salt thereof, for the preparation of a medicament for destroying proliferating cells.

2. Use according to claim 1, **characterized in that** the nucleotide sequence of the oligoribo- or oligodeoxyribonucleotide is complementary to SEQ ID NO 1.

3. Use according to claim 2, **characterized in that** the nucleotide sequence of the oligoribo- or oligodeoxyribonucleotide is complementary to the section from position 197 to 9962 of SEQ ID NO 1.

4. Use according to anyone of claims 1 to 3, **characterized in that** the oligoribo- or oligodeoxyribonucleotide contains 12 to 66 nucleotides.

5. Use according to anyone of claims 1 to 4, **characterized in that** the oligoribo- or oligodeoxyribonucleotide contains 17 to 46 nucleotides.

6. Use according to anyone of claims 1 to 5, **characterized in that** the oligoribo- or oligodeoxyribonucleotide has the sequence (5'-ACC AGG CGT CTC GTG GGC CAC AT).

7. Use according to anyone of claims 1 to 6, **characterized in that** one or more phosphate groups of the oligoribo- or oligodeoxyribonucleotide are replaced by phosphothioate, methylphosphonate, phosphoramidate, methylene(methylimino) and/or guanidine group(s).

8. Use according to anyone of claims 1 to 7, **characterized in that** the oligoribo- or oligodeoxyribonucleotide has a terminal 3'-3' and/or 5'-5' internucleotide linkage.

9. Medicament, **characterized by** a content of an oligoribo- and/or oligodeoxyribonucleotide which is capable of hybridizing with the mRNA which codes for the cell cycle-associated protein Ki-67, or of a physiologically acceptable salt thereof, in addition to conventional carrier substances, auxiliaries and/or additives, wherein the amount of oligonucleotide is adjusted such that an administration of 0.001 to 100 mg/kg of body weight is achieved.

10. Use according to anyone of claims 1 to 8 for treatment of tumours, autoimmune diseases, cicatrization, inflammations, allergies, rheumatic diseases and rejection reactions following transplantations.

11. Process for the preparation of a medicament for destroying proliferating cells, **characterized by** the use of oligoribo- or oligodeoxyribonucleotides which are capable of hybridizing with the mRNA which codes for the protein Ki-67, or of a physiologically acceptable salt thereof.

12. Process according to claim 11 for the preparation of a medicament for treatment of tumours, autoimmune diseases, cicatrization, inflammations, allergies, rheumatic diseases or rejection reactions following transplantations.

13. Process according to claim 11 or 12, comprising combining of an oligoribo- or oligodeoxyribonucleotide which is capable of hybridizing with the mRNA which codes for the protein Ki-67 with conventional carrier substances, auxiliaries and/or additives.

14. Oligoribo- or oligodeoxyribonucleotide, **characterized in that** it is capable of hybridizing with the mRNA which codes for the protein Ki-67, and that it contains 22 to 46 nucleotides, or a physiologically acceptable salt thereof.

15. Oligoribo- or oligodeoxyribonucleotide according to claim 14, **characterized in that** it contains the sequence (5' -ACC AGG TGA GCC GAG GAC GCC ATC).